region in the second CLC layer, and wherein a patterned broad-band CLC reflective layer is provided beneath the first CLC layer in order to realize the broad-band inter-subpixel "white" reflective matrix-like pattern between neighboring subpixel regions; in order to improve light recycling off the TFT and associated wiring regions surrounding the light transmission aperture of each and every subpixel realized the liquid crystal (LC) spatial-intensity modulation panel of the LCD panel assembly of **FIG. 2**;

[**0116**] **FIG. 5B2** is a schematic representation of an exemplary broad-band inter-subpixel "white" matrix-like pattern formed about a single pixel structure (comprising a red, green and blue subpixel structure) disposed beneath the lower CLC-filter layer of the CLC-based spectral filtering structure shown in **FIG. 5B1**;

[**0117**] **FIG. 5C** is a schematic representation illustrating the spatial layout of an array of pixel structures, as depicted in FIGS. **5B1** and **5B2**, in exemplary embodiment of the LCD panel assembly of **FIG. 2**;

[**0118**] **FIG. 6A** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "red-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the red-band of the electromagnetic spectrum and having a LHCP state are strongly reflected from the layer, while spectral wavelengths residing within the blue and green bands and having a LHCP polarization state are weakly reflected from the layer;

[**0119**] **FIG. 6B** is a schematic representation graphically illustrating the actual spectral transmission characteristics of a "red-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the blue and green bands of the electromagnetic spectrum and having a LHCP state are strongly transmitted through the layer, while spectral wavelengths residing within the red band and having a LHCP polarization state are weakly transmitted through the layer;

[**0120**] **FIG. 6C** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "green-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the green-band of the electromagnetic spectrum and having a LHCP state are strongly reflected from the layer, while spectral wavelengths residing within the blue and red bands and having a LHCP polarization state are weakly reflected from the layer;

[**0121**] **FIG. 6D** is a schematic representation graphically illustrating the actual spectral transmission characteristics of a "green-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, wherein spectral wavelengths residing within the blue and red bands of the electromagnetic spectrum and having a LHCP state are strongly transmitted through the layer, while spectral wavelengths residing within the green band and having a LHCP polarization state are weakly transmitted through the layer;

[**0122**] **FIG. 6E** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "blue-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the blue-band of the electromagnetic spectrum and having a LHCP state are strongly reflected from the layer, while spectral wavelengths residing within the green and red bands and having a LHCP polarization state are weakly reflected from the layer;

[**0123**] **FIG. 6F** is a schematic representation graphically illustrating the actual spectral transmission characteristics of a "blue-band" reflecting region formed in the second (i.e. top) patterned CLC layer of the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the green and red bands of the electromagnetic spectrum and having a LHCP state are strongly transmitted through the layer, while spectral wavelengths residing within the blue band and having a LHCP polarization state are weakly transmitted through the layer;

[**0124**] **FIG. 6G** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "blue" subpixel region formed by the composition of the CLC layers in the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the green and red bands of the electromagnetic spectrum and having a LHCP state are strongly reflected from the subpixel structure, while spectral wavelengths residing within the blue band and having a LHCP polarization state are weakly reflected from the layer (i.e. strongly transmitted therethrough);

[**0125**] **FIG. 6H** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "green" subpixel region formed by the composition of the CLC layers in the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing that spectral wavelengths residing within the blue and red bands of the electromagnetic spectrum and having a LHCP state are strongly reflected from the subpixel structure, while spectral wavelengths residing within the green band and having a LHCP polarization state are weakly reflected from the layer (i.e. strongly transmitted therethrough);

[**0126**] **FIG. 6I** is a schematic representation graphically illustrating the actual spectral reflection characteristics of a "red" subpixel region formed by the composition of the CLC layers in the CLC-based spectral filtering structure depicted in **FIGS. 5 through 5B1**, made using CLC film fabrication methods of the present invention disclosed herein, showing